

I. Assumptions and Recommendations

**1a. Confirming our focus/limiting our scope**

- The role of this work group is to develop a vision – describing what the health technology world should look like in five years.
- It is important to distinguish the different, but related concepts of HIT (info technology built inside an enterprise) and HIE (exchange of interoperable information between organizations), understanding that the state roadmap must address both but will probably approach them differently in terms of financing and implementation strategies. Our focus to date has been on HIE, and more specifically on the exchange of information that will improve clinical care - not on developing clinical quality measures because this work is already being done by organizations such as the Wisconsin Collaborative for Healthcare Quality, the Wisconsin Health Information Organization and national specialty societies.

**1b. Defining our process**

- Our work to date has included meetings of members and surveys of stakeholders leading to a prioritization of HIE functions. The decision making in this group has been informed by the stakeholder data collected for the eHealth Board through the spring of 2006, augmented by additional survey instruments.
- As the work group has established its priorities for patient care solutions the focus is shifting to writing a series of use cases, leveraging work that is being done in other regions or states and by the American Health Information Community, the national eHealth board established by Secretary Leavitt.
- Vetting results with stakeholders. A list of stakeholder groups is being compiled. A session will be arranged for September to which the groups will be invited to learn more about what the Patient Care group is recommending and why, and to get reaction and advice. It will be coordinated with the forum the Consumer Interests group is planning and include both public sector and private sector providers.
- As we need to focus on both patient and provider needs in determining the information that is exchanged as the needs may be very different, both the Patient Care and Consumer Interests groups are making recommendations about which problems they believe are most urgent to solve. With this information the Information Exchange and Finance groups can assess the feasibility of each recommendation. With this information, a matrix will be constructed to show the results.

Road Map Prioritization based on both urgency and feasibility

	High Feasibility	Low Feasibility
High Urgency	Early (Years 1-2)	Mid (Years 3-5)
Low Urgency	Mid (Years 3-5)	Late (Beyond 5)

**1c. Overarching concepts and qualifiers**

- On the plans to do a survey of work group members, we need to be aware of the problems associated with having too narrow of an audience and resulting selection bias. We understand medicine is trying to move from opinion basis to evidence basis and so too should the formulation of our patient care strategies.
- An important starting point for clinicians is having a basic set of information about the patient immediately available – diagnoses, medications, and progress reports. From a patient point of view, priorities are major diagnoses, medications and allergies.
- Information must be easily accessed and systems easy to learn because physicians are working with so many different systems today.
- There is a distinction between information that is needed in the local market area, the natural referral area within which most patients receive most of their care, and what is needed statewide. Some data makes sense to organize on a statewide basis, especially to support public health and health policy (an example is immunizations).
- It is also important to think about quality of care and adherence to practice guidelines. For example both asthma and diabetes have significant morbidity and mortality, there are good practice guidelines but they are not adopted uniformly. Information systems should enable us to improve in this area.

- Cost savings are possible in systems that allow clinicians to easily view previous test results and services received, and medications dispensed and used, to reduce redundancy. Other potential benefits include reducing office staff, reducing billing lags, and in some situations options for patients to see results without a provider as an intermediary.
- There are significant interests about the quality and depth of the information for multiple public health purposes.
- It will be important to have a way to correct information that is wrong in these records while recognizing that it is not possible to eliminate all errors and all risks. Policies and liability protection will be needed - there is a possible role for the state to provide some liability protection in this new environment. The preference is for a system that provides patients with access to their records and a way to get incorrect information fixed. The importance of patient control over their own health records is seen in the model for the “eHealth Trust” developed by Dr Yasnoff, who presented at the Digital Health Care Conference in May in Madison. This model is based on a principle of personal patient responsibility to manage their own health information.
- It is important to pursue a standardized way to provide insurance coverage information, because of the significant administrative burden in the current system without any standardization, and because a system that provides this function provides additional incentive to clinicians to use the system to support clinical care.

#### **1d. Identify preconditions for success**

- It is important to align the state’s work with national developments including the American Health Information Community (AHIC), the advisory group to DHHS Secretary Mike Leavitt. AHIC includes four work groups that are looking for early breakthroughs including establishing patient access to a personal health record, interlinked electronic health records, biosurveillance, and chronic care.
- Ensuring that confidentiality and security are considered is critical for acceptance. The requirements of data exchange that efficiently supports clinical care, quality analysis, and improvements in cost and value must be balanced against the individual and societal needs for security and confidentiality.
- A master person index is required to implement effective health information exchange. This should be pursued in a way that is compliant with emerging national standards.
- The Information Exchange group will address options for how to do this including looking at how to leverage resources that already exist in the state as well as security architecture and what should occur regionally vs. statewide. They will define what

information is to be shared initially, how to bring in future items over time, who will have access to these records, and who will administer those rights.

- One model from a community with existing health information exchanges begins with establishing point-to-point results and documents delivery between service providers, building many of the prerequisites to the more challenging vision of a patient-centric shared record built from information from multiple stakeholder organizations. Results and document delivery can be performed for a user who have as little technology as a fax machine and utilizes data sharing agreements that differ little from today's practice, while building infrastructure for more ambitious exchange. For example, Michigan's goals for the next five years are that all providers will have high-speed Internet (as defined today), all providers will have reasonably-priced access to either a free-standing in-office electronic medical record (EMR) or an Internet-served EMR application, and a majority of people in the state are on the Internet and could use a secure system to access their data. This model was endorsed by the Patient Care group as a reasonable vision of the infrastructure on which to base information exchange in five years.
- Requirements to move beyond this to a patient-centric shared record built from information from multiple stakeholders include: 1) high-speed Internet access; 2) access to patient data on databases that already exist such as immunization; 3) need to identify source of data for quality; 4) displaying data that meets certain quality standards; 5) access to original clinical documents when possible; 6) exchange information in the same way (CCHIT certification); 7) authorization system, 7) record locator or master person index (MPI); 8) consent/opt out issues need to be defined; 9) confidentiality; 10) standardize what we can, but look forward to what can be standardized in the future.

#### **1e. Survey results and interpretation leading to our priority ranking**

- The results from the prioritization exercise completed by the Patient Care and Consumer Interests workgroups informed the discussion and decision making in this group (each person was to complete the survey twice, first from a professional and then from a consumer standpoint, and was allowed seven votes each time to identify priorities). The items in the list were roughly sorted into the following categories: safety (reduction of medical injury), administrative cost reduction, population health and health care access, patient empowerment, continuity and collaboration, research, redundant and expensive care, and quality systems. Based on the responses, the scores were combined and the general categories of high interest identified.
- Respondents for the professional portion of the survey were charged with voting for the things that were most important in solving the most pain in the next five years; not what was practical or doable. A summary of the professional survey results follows:
  - There were 14 respondents. 20 categories receiving two or more votes.
  - By far the most prevalent priority was "Access across organizations" (9 votes).

- There was high emphasis on systems that enhance quality of care, including the need for shared information across organizations, care coordination and collaboration, patient record view and preferences, and public health surveillance and case management.

Increased emphasis on evidence-based care was low on this prioritization survey, but high in the baseline stakeholder survey.

- Having access to the medical information across organizations was also a clear leader in the results of the survey as the Patient Care group considered this from a consumer perspective. There was clearly a strong focus on patient information tools, patient safety, and cost and efficiency. Quality and collaboration were high in both professional and consumer groups with strong interest in both quality and cost savings.
- The Consumer Interests group has now considered these priority rankings done by the Patient Care group to specifically note any areas where privacy and security concerns are anticipated and to consider if there are other data elements to add to make the summary more consumer-friendly.






#### **1f. Priorities, use case development and validation**

After lengthy discussion about the types of information that should be exchanged, this priority list was established:

- a. identity/demographics/master person index
  - b. diagnoses/encounter diagnoses
  - c. medications
  - d. allergies
  - e. labs and other diagnostics (results reporting)
  - f. procedures
  - g. immunizations
  - h. patient visits and hospitalizations
  - i. discharge summaries and progress notes
  - j. emergency contact
  - k. advance directives
  - l. payers/insurance/coverage and eligibility
- While the work group ranked advance directives relatively low in their ranking of priority data elements, the expectation is that it will be included eventually. Current hospital information systems tend to answer the question of advance directives

availability only in a yes/no format which requires going to another location to get the actual content of the directive. The goal is to have advance directive information incorporated into the electronic patient summary accessible through a common portal.

- The work group will bring its recommendations to stakeholders for broader validation by sending out an overview document and scheduling a listening session in September that can be attended in person or by web cast.
- Developing use case scenarios - these are intended to be real-life examples. The group started by looking for examples that have already been created by other organizations including those that have been prioritized by the American Health Information Community and others to determine exactly what to recommend for Wisconsin and in what sequence. The group also took into account the high priority placed by the Consumer Interests group on these features:
  - i. access
  - ii. security
  - iii. communications
  - iv. decision support including practice guidelines for specific conditions
- Work group members considered the options for use cases from various perspectives including the priorities established by AHIC and the impact on public health, cost, and improvement in safety and quality of health care, and then developed the following proposals for Wisconsin to consider. It is assumed that privacy and security are cross-cutting issues in all scenarios

Wisconsin Proposed Use Cases	Correspond or expand upon American Health Information Community Harmonized Use Case:
<b>1. Result &amp; document delivery</b>  PH Electronic Lab Reporting (Mandated)  PH Lab Decision Support Alerts  Diagnostic test results & document look-up  Image delivery and/or look-up  “Original record” content (e.g., clinical records, test interpretations) linked to patient summaries for look-up	1. Laboratory Results Reporting use case
<b>2a. Registration and claims record repository</b>	2. Consumer Empowerment (registration and

<ul style="list-style-type: none"> <li>➤ Registration-driven authorization for look-up functions</li> <li>➤ Look-up prior visits/diagnoses</li> <li>➤ PH chief complaint (CC) surveillance</li> <li>➤ PH CC Decision Support Alerts</li> <li>➤ PH demographic Decision Support Alerts</li> <li>➤ PH resource utilization surveillance</li> </ul> <p><b>2b. Patient Health Record registration module</b></p> <ul style="list-style-type: none"> <li>➤ Patient data aids registration</li> <li>➤ Advanced directives viewable</li> </ul> <p><b>2c. Medication-Allergy-Immunization record</b></p> <ul style="list-style-type: none"> <li>➤ Clinician look-up or download</li> <li>➤ Allergy/interaction decision support</li> <li>➤ Pt. adherence decision support</li> <li>➤ Formulary decision support</li> <li>➤ EBM guidelines decision support</li> </ul> <ul style="list-style-type: none"> <li>➤ Added to Patient Health Record</li> <li>➤ Future patient decision support</li> <li>➤ Patient annotation of medical-allergy-immunization record</li> </ul> <p><b>2d. Harmonization of WIR-RECIN data &amp; function on immunizations</b></p>	medication history) use case
(Above-mentioned surveillance of mandated laboratory reports, chief complaints and health care resource utilization)	3. Biosurveillance use case

Notes:

\* Arrows indicate subsequent use case development that is at least partially dependent on prior use case development.

\* Public health (PH) decision support alerts: envisions possible transmission of a public health message to a provider (possibly later to patients) related to a patient with a particular laboratory result (e.g., lead level, syphilis test); chief complaint; or demographics/past diagnoses (e.g., asthma).

## II. Status report on assignments

<b>Assignments</b>	<b>Status/Issues</b>
1) Define criteria (such as reach, feasibility and impact) to prioritize the key product types (such as Continuity of Care record or other abstract of medical history information, clinical care – public health business interoperability, e-Prescribe, use of statewide guidelines) and identify and prioritize the key product types to be implemented in the Action Plan.	Criteria established; priorities established – ready to review with eHealth Board, other work groups and stakeholders
2) Define use case examples (real-world examples) that are appropriate for the first key products.	First set established and ready for initial review
3) Develop information on current use of electronic health records in Wisconsin.	A survey will be done by a vendor on both HIT and HIE in Wisconsin
4) Identify positive opportunities and barriers to wider adoption of electronic health information systems in all types of medical care settings. Recommend strategies to take advantage of opportunities and overcome barriers to foster statewide adoption.	To do in coordination with Finance work group
5) Coordinate and give input to other work groups.	Ongoing
6) Present findings, analysis, and recommendations to the Board at the August 3, 2006 meeting.	
7) Review draft of “Information Exchange” section of eHealth Action plan	To do in August and September
8) Submit final recommendations to be included in the eHealth Action Plan to the eHealth Board	Needed by late September



### III. Issues for discussion with eHealth Board

#### **1. A. Confirming our focus / limiting our scope**

Q - Are there questions/comments about our focus?

Q - Any concern with our focus on cross enterprise exchange and not on HIT?

#### **1. B. Defining our process**

Q - We understand the pressure of our timeline limits the depth of study.

Q - Are there other suggestions re: how we can best meet our charge?

#### **1. C. Discussion / Agreement on overarching concepts and qualifiers**

Q - Other ideas about key themes or concepts we need to remember?

#### **1. D. Identify preconditions for success**

Q - Other preconditions? Suggestions for satisfying these preconditions?

#### **1.E. Survey results and interpretation leading to priorities**

Q - Validation/discussion re our conclusions?

Q - Are there other methods we should be pursuing for validation and to extend ownership in our process?

#### **1. F. Use case development**

Q - Any questions or suggestions re our use cases, their focus, will they cover the major needs identified in our priority rankings?